

ABSTRACT

The present invention provides an EDMOS (extended drain MOS) device having a lattice type drift region and a method of manufacturing the same. In the case of n channel EDMOS(nEDMOS), the drift region has a lattice structure in which an n lattice having a high concentration and a p lattice having a low concentration are alternately arranged. As a drain voltage is applied, a depletion layer is abruptly extended by a pn junction of the n lattice and the p lattice, so that the entire drift region is easily depleted. Therefore, a breakdown voltage of the device is increased, and an on resistance of the device is decreased due to the n lattice with high concentration.